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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/724,696

12/02/2003

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03/04/2008

EXAMINER

FLANDERS, ANDREW C

ART UNIT

PAPER NUMBER

2615

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/724,696

Applicant(s)

LIANG, HSIEN-RONG

Examiner

Andrew C. Flanders

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**


- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 – 7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 1 is directed to an apparatus claim in the preamble. However, claim 1 includes method steps such as the “a system flow occurs..” paragraph. Since <sup>the</sup> ~~the~~ claim is directed to neither a “process” nor a “machine”  but rather overlaps two statutory classes, it is non statutory. See MPEP 2173.05(p) II.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 – 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 is directed to an apparatus claim in the preamble. However, claim 1 includes method steps such as the “a system flow occurs..” paragraph. Since the claim is directed to neither a “process” nor a “machine” but rather overlaps two statutory classes, it is indefinite. See MPEP 2173.05(p) II.

***Claim Objections***

Claims 1 – 7 are objected to because of the following informalities:

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1 – 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon (U.S. Patent 7,065,417) in view of Hirota (U.S. Patent Application Publication 2003/0221103) and in further view of Thielen (U.S. Patent Application Publication 2004/0117442).

Regarding **Claim 1**, Moon discloses:

A multipurpose media player memory card reader (fig. 2) comprising an upper cover, a lower cover (covers inherent casing of device shown in Fig. 2), and a circuit board (Fig. 2).

Moon does not disclose the circuit board having characteristics such the circuit board is configure to include a card reader circuit and memory card slots. However, it was notoriously well known in the art at the time of the invention to use a flash memory card reader and flash memory card for the purpose of playing music in a device such as the one disclosed by Moon. Hirota discloses a player (Figs. 2 and 4) that uses a flash memory card (109) to store music for playback. Applying this memory card and reader to function via the Extended ROM Interface (511) of Moon discloses:

the circuit board is configure to include a card reader circuit (Flash ROM controller 527 of Moon as modified by Hirota, controls the memory card and reading device taught by Hirota) and memory card slots (206 of Hirota as applied to Moon).


It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hirota to the player disclosed by Moon. The removable card feature allows the music to be enjoyed as a variety of locations as taught by Hirota in paras 1 - 8. Moon also realizes that it is desirable to include an expandable memory via the inclusion of an Extended ROM interface 511.

The combination further discloses:

the circuit board is configured to include a card reader port (800), a control circuit (501), a multimedia player circuit (501), a battery (100), memory (601), a socket (703), a transmitter circuit (523), a transmitter (800), and an electric power socket (adaptor to 200).

Moon does not disclose a separate card reader port and transmitter, a separate control circuit and multimedia player circuit or that the transmitter is wireless.

Moon discloses the transmitter in a very general sense. Moon states that the transmitter/receiver 800 can transmit or receive data from a number of various sources. This type of transmission is the same transmission provided by the transmitter and card reader port of the instant Application. While Moon isn't very detailed in this description of the transmission port, it meets the standards disclosed by Applicant. Numerous types of transmission mediums and connections are notoriously well known in the art. Simply separating them into two connections/devices would have been obvious to try does not produce any new or unexpected results.

Moon also discloses that the control is performed by the CPU as well as the media decoding; col. 4. Applicant performs these processes using two distinct modules. Separating the two devices instead of including them in the same package would have been obvious to one of ordinary skill in the art to try <sup>and since it</sup> does not produce any new or unexpected results. 

Further, Examiner takes official notice that wireless transmitters are notoriously well known in the art and it would have been obvious to use on as the transmission/reception device taught by Moon in order to allow a quick, tangle free connection to the various devices. Shanahan (U.S. 6,496,692) for example teaches that wireless and wired links between devices such as Moons and its connected device are notoriously well known; col. 3 lines 15 - 25.

The remaining limitations of claim 1 are considered to not further limit the claim as they do not limit the particular structure. The remaining elements are only

functionally upon certain conditions and are not required to actually be performed. For example, the system flow only occurs upon inserting a memory card, the transmitter circuit only transmits multimedia data when outputting, the battery only provides electric power when the circuits are in operation and the card reader operates only when playing multimedia data. Please see MPEP 2111.04.

For the purpose of expediting prosecution, the remaining limitations will be given weight in regards to prior art.

The combination further discloses:

a system flow occurs upon inserting a memory card into a memory card slot (Figs. 7 and 12 of Hirota), the card circuit reads data within the memory card or the control circuit reads data stored within memory (para 171, 172; step 1011 of Hirota), the control circuit differentiates whether or not the data is multimedia data (the CPU of Hirota determines where the music data is stored; either the encrypted memory portion 426 or the user data portion 427; paras 105-110 and Fig. 6; if it is to be read from the authenticated area, it is determined to be playable music; also see paras 79 – 83 which disclose that the PC may store various forms of data to the memory card, indicating an inherent determination must be performed to ascertain the type of the data being read), and the multimedia data is transmitted to the multimedia player circuit (S909 Fig. 1), whereupon the multimedia data is converted to sound signals and output through an outlet (S910; playback; it should be noted that fig 11 shows the embodiment for the

player 210, but the disclosure also indicates this playback can be performed by the PC; para 56 and 148),

when outputting multimedia data, the wireless transmitter circuit and the transmitter are configured to transmit multimedia data as wireless signals (i.e. controller 523 of moon controls data input and output through the transmitter/receiver; this transmitter can be a wireless transmitter as shown above).

The combination does not explicitly disclose whereupon multimedia equipment of a vehicle receiving the wireless signals can play the multimedia data.

Thielen discloses a portable player that has the ability to play downloaded music in a vehicle via the use of an FM transmission (abstract and other various passages). Applying this to the combination discloses whereupon multimedia equipment of a vehicle receiving the wireless signals can play the multimedia data.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the teachings of the wireless playback through a vehicle as taught by Thielen to the combination. One would have been motivated to do so to avoid replacing the existing vehicle stereo in a user of the combination and to avoid non seamless fixed installation of the device using accessories as well as various other reasons disclosed in paras 22 – 26 of Thielen.

The combination further discloses:

a battery provides electric power required when the control circuit and the multimedia player circuit are in operation, moreover, the card reader port connected to a computer port enables recharging of the batter, making it unnecessary to replace the



battery (i.e. the power supply of Moon is a battery, which supplies power to the various devices; col. 3; this battery is rechargeable through power received through an adaptor; col. 3);

when playing multimedia data, the card reader is adapted to reciprocally connect to a computer port through a connector port of the card reader (i.e. connect via the transmitter receiver of Moon to a PC; col. 5), thereby the card reader achieves functionality as a removable connected hard disk, whereby a user is able to save data within a memory card and through the card reader (i.e. the flash card of Hirota can save any type of user data, the connection via Moon is used to transmit data to or from the device).

Regarding **Claim 2**, in addition to the elements stated above regarding claim 1 the combination further discloses:

wherein the card reader port can comprise a USB port (Universal Serial Bus), COM1/COM2 communication ports, PRINT PORT, and related ports utilized by electronic digital products (i.e. the transmitter/receiver of Moon can be any one of the variety of known connections; for example a USB, RS232 or Parallel port as disclosed in Shanahan).

Regarding **Claim 3**, in addition to the elements stated above regarding claim 1 the combination further discloses:

wherein the memory card slots are compatible with CF card (Compact Flash Card), MS card (Memory Stick Card), SM card (Smart Media Card), and related medium utilized to store electronic digital data (memory card of is any of known format of media cards at the time of the invention; paras 2, 4 and 251).

Regarding **Claim 4**, in addition to the elements stated above regarding claim 1 the combination further discloses:

wherein the memory can be RAM (Random Access Memory), DRAM (Dynamic Random Access Memory), SRAM (Static Random Access Memory)), SDRAM (Synchronous Dynamic Random Access Memory), FLASH, and related memory utilized by electronic digital products (i.e. RAM element 601 of Moon)

Regarding **Claim 5**, in addition to the elements stated above regarding claim 1 the combination further discloses:

wherein the battery can employ carbon zinc battery, mercury battery, lithium battery, nickel-hydrogen battery, and related batteries employed in electrical digital products (col. 3 of Moon lines 5 – 55)

Regarding **Claim 6**, in addition to the elements stated above regarding claim 1 the combination further discloses:

wherein the wireless transmitter circuit and wireless signals of the transmitter are further configured to comply with AM (Amplitude Modulation) signals, FM (Frequency Modulation) signals, Bluetooth signals, IEEE 802, 11A, B (Institute of Electrical and Electronic Engineers 802, 11A, B), and related modulation carrier wave signals of wireless communication (i.e. FM wireless transmission as disclosed by Thielen)

Regarding **Claim 7**, in addition to the elements stated above regarding claim 1 the combination further discloses:

wherein a transformer, vehicle usage plug and related connecting equipment utilized to connect to power supply sockets can be connected to the electric power socket (power adapted for supplying power to Moons battery; col. 3; exact adapter is not disclosed, but any number of adapters are notoriously well known in the art an obvious to try).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Flanders whose telephone number is (571) 272-7516. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7546. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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**SINH TRAN**  
**SUPERVISORY PATENT EXAMINER**

acf